

CLAIMS

1. An idler having a shell with at least one core within the shell, the shell having at least one inwardly projecting shell formation, and the core having at least one outwardly projecting core formation, with the shell formation and the outwardly projecting core formation being engaged with one another.
2. The idler of claim 1 wherein the shell has a plurality of spaced axially extending inwardly projecting shell formations, and the core has a plurality of spaced axially extending outwardly projecting core formations, with the shell formations being in interlocking engagement with the core formations.
3. The idler of claim 2 wherein the shell formations project radially inwardly, and the outwardly projecting core formations project radially outwardly.
4. The idler of claim 2 or claim 3 wherein the shell formations and the outwardly projecting core formations are in interlocking engagement with one another by way of an interference fit.
5. The idler of any one of claims 2 to 4 wherein the shell formations taper outwardly along their length from an outer end of the shell and inwardly along their height towards their free ends, and wherein the outwardly projecting core formations taper inwardly along their length from an outer end.
6. The idler of any one of claims 2 to 5 wherein the shell formations are ribs and the outwardly projecting core formations are ribs.
7. The idler of any one of the above claims wherein the shell is moulded from a polymeric material and wherein the core is moulded from a polymeric material.

8. The idler of any one of the above claims wherein the core includes a bearing receiving zone containing a bearing rotatably supporting the idler on a shaft.
9. The idler of any one of the above claims wherein the core is an outer core containing at least one inner core, the inner core having at least one outwardly projecting inner core formation, and the outer core having at least one inwardly projecting outer core formation, with the outwardly projecting inner core formation and the inwardly projecting outer core formation being in engagement with one another.
10. The idler of any one of the above claims including two cores within the shell, each core extending into the shell from an opposite end of the shell.
11. The idler of claim 10, insofar as it is dependent on claim 9, wherein each outer core contains an inner core.
12. The idler of claim 10 or claim 11 wherein the shell consists of two sections connected together by a connector located intermediate the two cores.
13. The idler of claim 12 wherein the shell sections are connected to the connector by way of friction welding.
14. An idler having a shell with an outer surface and an inner surface, with a plurality of spaced axially extending inwardly projecting ribs.
15. A shell for an idler, the shell being injection moulded from a polymeric material and having an outer surface, with a plurality of spaced axially extending inwardly projecting ribs.
16. A core for an idler, the core being injection moulded from a polymeric material and having an outer surface with a plurality of spaced axially extending outwardly projecting ribs.

17. The core of claim 16 including a bearing receiving zone at one of its ends.
18. An idler substantially as herein described and illustrated with reference to the accompanying drawings.
19. A shell for an idler, the shell being substantially as herein described and illustrated with reference to the accompanying drawings.
20. A core for an idler, the core being substantially as herein described and illustrated with reference to the accompanying drawings.
21. A sealing arrangement including a body rotatable relative to a shield with the body having a housing for a bearing, and the arrangement including a labyrinth seal located between the shield and the body and/or a centrifugal seal formed by a curved surface on the exterior of the body.
22. A sealing arrangement including a shield and a body, with the shield having a bore for a shaft and a projection with an abutting end surface for abutting a stationary surface axially to space the shield from the body and a connector for connecting the shield to the body so that in use the body can rotate relative to the shield, with the sealing arrangement including a labyrinth seal and/or a centrifugal seal.